SEQUENCE LISTING

<110> Herr, John C.
Shetty, Jagathapala
Wolkowicz, Michael
Jayes, Friederike
Hao, Zhonglin

<120> Sperm Specific Proteins

<130> 00497-02

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<150> 60/176,885
<151> 2000-01-19

<160> 20

<170> PatentIn Ver. 2.1

<210> 1
<211> 1337
<212> DNA
<213> Homo sapiens

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gaagccctta gtccttctag ttgcgctttt gctatggcct tcgtctgtgc cggcttatcc 120

gagcataact gtgacacctg atgaagagca aaacttgaat cattatatac aagttttaga 180

gaacctagta cgaagtgttc cctctgggga gccaggtcgt gagaaaaaat ctaactctcc 240

aaaacatgtt tattctatag catcaaaggg atcaaaattt aaggagctag ttacacatgg 300

agacgcttca actgagaatg atgttttaac caatcctatc agtgaagaaa ctacaacttt 360

ccctacagga ggcttcacac cggaaatagg aaagaaaaaa cacacggaaa gtaccccatt 420

ctggtcgatc aaaccaaaca atgtttccat tgttttgcat gcagaggaac cttatattga 480

aaatgaagag ccagagccag agccggagcc agctgcaaaa caaactgagg caccaagaat 540

gttgccagtt gttactgaat catctacaag tccatatgtt acctcataca agtcacctgt 600

caccacttta gataagagca ctggcattga gatctataca gaatcagaag atgttcctca 660

gctctcaggt gaaactgcga tagaaaaacc cgaagagttt ggaaagcacc cagagagttg 720

gaataatgat gacattttga aaaaaatttt agatattaat tcacaagtgc aacaggcact 780

tcttagtgac accagcaacc cagcatatag agaagatatt gaagcctcta aagatcacct 840

aaaacccagc cttgctctag cagcagcagc agaacataaa ttaaaaacaa tgtataagtc 900

ccagttattg ccagtaggac gaacaagtaa taaaattgat gacatcgtaa ctgttattaa 960

catgctgtgt aattctagat ctaaactcta tgaatattta gatattaaat gtgttccacc 1020

agagatgaga gaaaaagctg ctacagtatt caatacatta aaaaatatgt gtagatcaag 1080

gagagtcaca gccttattaa aagtttatta aacaataata taaaaatttt aaacctactt 1140

gatattccat aacaaagctg atttaagcaa actgcatttt ttcacaggag aaataatcat 1200

attcgtaatt tcaaaagttg tataaaaata ttttctattg tagttcaaat gtgccaacat 1260

ctttatgtgt catgtgttat gaacaatttt catatgcact aaaaacctaa tttaaaataa 1320

aattttggtt caggaaa 1337

<210> 2

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2

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Met Lys Pro Leu Val Leu Leu Val Ala Leu Leu Leu Trp Pro Ser Ser
  1               5                  10                  15

Val Pro Ala Tyr Pro Ser Ile Thr Val Thr Pro Asp Glu Glu Gln Asn
             20                  25                  30

Leu Asn His Tyr Ile Gln Val Leu Glu Asn Leu Val Arg Ser Val Pro
         35                  40                  45

Ser Gly Glu Pro Gly Arg Glu Lys Lys Ser Asn Ser Pro Lys His Val
     50                  55                  60

Tyr Ser Ile Ala Ser Lys Gly Ser Lys Phe Lys Glu Leu Val Thr His
 65                  70                  75                  80

Gly Asp Ala Ser Thr Glu Asn Asp Val Leu Thr Asn Pro Ile Ser Glu
                 85                  90                  95

Glu Thr Thr Thr Phe Pro Thr Gly Gly Phe Thr Pro Glu Ile Gly Lys
            100                 105                 110

Lys Lys His Thr Glu Ser Thr Pro Phe Trp Ser Ile Lys Pro Asn Asn
        115                 120                 125

Val Ser Ile Val Leu His Ala Glu Glu Pro Tyr Ile Glu Asn Glu Glu
    130                 135                 140

Pro Glu Pro Glu Pro Glu Pro Ala Ala Lys Gln Thr Glu Ala Pro Arg
145                 150                 155                 160

Met Leu Pro Val Val Thr Glu Ser Ser Thr Ser Pro Tyr Val Thr Ser
                165                 170                 175
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Tyr Lys Ser Pro Val Thr Thr Leu Asp Lys Ser Thr Gly Ile Glu Ile
180 185 190

Tyr Thr Glu Ser Glu Asp Val Pro Gln Leu Ser Gly Glu Thr Ala Ile
195 200 205

Glu Lys Pro Glu Glu Phe Gly Lys His Pro Glu Ser Trp Asn Asn Asp
210 215 220

Asp Ile Leu Lys Lys Ile Leu Asp Ile Asn Ser Gln Val Gln Gln Ala
225 230 235 240

Leu Leu Ser Asp Thr Ser Asn Pro Ala Tyr Arg Glu Asp Ile Glu Ala
245 250 255

Ser Lys Asp His Leu Lys Pro Ser Leu Ala Leu Ala Ala Ala Ala Glu
260 265 270

His Lys Leu Lys Thr Met Tyr Lys Ser Gln Leu Leu Pro Val Gly Arg
275 280 285

Thr Ser Asn Lys Ile Asp Asp Ile Val Thr Val Ile Asn Met Leu Cys
290 295 300

Asn Ser Arg Ser Lys Leu Tyr Glu Tyr Leu Asp Ile Lys Cys Val Pro
305 310 315 320

Pro Glu Met Arg Glu Lys Ala Ala Thr Val Phe Asn Thr Leu Lys Asn
325 330 335

Met Cys Arg Ser Arg Arg Val Thr Ala Leu Leu Lys Val Tyr
340 345 350

<210> 3
<211> 22
<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR primer

<220>
<221> primer_bind
<222> (1)..(22)

<400> 3
cttgctctag cagcagcaga ac 22

<210> 4
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(30)

<400> 4
tcataacaca tgacacataa agatgttggc 30

<210> 5
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>

<221> primer_bind
<222> (1)..(43)

<400> 5
catgcatgcc atggatccga gcataactgt gacacctgat gaa 43

<210> 6
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(44)

<400> 6
gagtcgctcg agataaactt ttaataaggc tgtgactctc cttg 44

<210> 7
<211> 14
<212> PRT
<213> Homo sapiens

<400> 7
Ala Ser Thr Pro Glu Val Gln Ser Glu Gln Ser Ser Val Arg
1 5 10

<210> 8
<211> 1455
<212> DNA
<213> Homo sapiens

<400> 8

gcgcttcgac gtacctgtcc tcaggagccg cggcggcgac tgcgcctcgg acggccgtcg 60

gggccgagaa ccatgagccc caggggcacg ggctgctccg ccgggctgct gatgactgtc 120

ggctggctgc ttctggcggg cctccagtcc gcgcgcggga ccaacgtcac cgctgccgtc 180

caggatgccg gcctggccca cgaaggcgag ggcgaggagg agaccgaaaa caacgacagc 240

gagaccgcgg agaactacgc tccgcctgaa accgaggatg tttcaaatag gaatgtcgtc 300

aaagaagtag aattcggaat gtgcaccgtt acatgtggta ttggggttag agaagttata 360

ttaacaaatg gatgccctgg tggtgaatcc aagtgtgttg tacgggtaga agaatgccgt 420

ggaccaacag attgtggctg gggtaaacca atttcagaaa gtcttgaaag tgttagattg 480

gcatgtattc acacatctcc cttaaatcgt ttcaaatata tgtggaaact tctaagacaa 540

gaccaacaat ccattatact tgtaaatgat tcagcaatcc tagaagtacg caaggaaagt 600

caccccttgg ctttcgagtg tgacacactg gataataatg aaatagtagc aactattaaa 660

ttcacagtct atacgagcag tgaattgcag atgagaagat caagcctacc agccactgat 720

gcagccctaa tttttgtgct gaccatagga gtcattatct gtgtatttat aattttctta 780

ttgatcttca taatcataaa ttgggcagca gtcaaggctt tttgggggggc aaaagcctct 840

acacctgagg tacaatccga gcagagttct gtgagataca aagattcaac ttctcttgac 900

caattaccaa cagaaatgcc tggtgaagat gatgctttaa gtgaatggaa tgaatgatgt 960

ttgaatgata tataacaaac caaaggatat tacagaatat tagattcatt attacaaaaa 1020

taaaatacac attgaaatac tttaataatg ttgcgatgga ttgccacagt gtgaaggaaa 1080

tgcagtgtgg ggataggact attttatcag tgcatttttc cagtacagtt atcaaatatt 1140

actttttaatt tgttctcaac acttatttca ggtaatagct tggggatatt tatctaaagt 1200

acccccaaca aatcttctaa gtgcattttt gatcactttg ataacttctt aggtgatttg 1260

cctgttttgt cttaaataag aacaatgtaa tatagaaatg ctttacatat tagactttct 1320

ctcccctgga agcactgggt tgaacttgct aaagtaaatc atactttaga atctcttcag 1380

ggaatgtgac atacaaagtt tgtaagacat gaagtaataa cgataatgat aacaataaat 1440

gcttacttag tgaaa 1455

<210> 9
<211> 294
<212> PRT
<213> Homo sapiens

<400> 9

Met Ser Pro Arg Gly Thr Gly Cys Ser Ala Gly Leu Leu Met Thr Val
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Gly Trp Leu Leu Leu Ala Gly Leu Gln Ser Ala Arg Gly Thr Asn Val
20 25 30

Thr Ala Ala Val Gln Asp Ala Gly Leu Ala His Glu Gly Glu Gly Glu
35 40 45

Glu Glu Thr Glu Asn Asn Asp Ser Glu Thr Ala Glu Asn Tyr Ala Pro
50 55 60

Pro Glu Thr Glu Asp Val Ser Asn Arg Asn Val Val Lys Glu Val Glu
65 70 75 80

Phe Gly Met Cys Thr Val Thr Cys Gly Ile Gly Val Arg Glu Val Ile
85 90 95

Leu Thr Asn Gly Cys Pro Gly Gly Glu Ser Lys Cys Val Val Arg Val
100 105 110

Glu Glu Cys Arg Gly Pro Thr Asp Cys Gly Trp Gly Lys Pro Ile Ser
115 120 125

Glu Ser Leu Glu Ser Val Arg Leu Ala Cys Ile His Thr Ser Pro Leu
130 135 140

Asn Arg Phe Lys Tyr Met Trp Lys Leu Leu Arg Gln Asp Gln Gln Ser
145 150 155 160

Ile Ile Leu Val Asn Asp Ser Ala Ile Leu Glu Val Arg Lys Glu Ser
165 170 175

His Pro Leu Ala Phe Glu Cys Asp Thr Leu Asp Asn Asn Glu Ile Val
180 185 190

Ala Thr Ile Lys Phe Thr Val Tyr Thr Ser Ser Glu Leu Gln Met Arg
195 200 205

Arg Ser Ser Leu Pro Ala Thr Asp Ala Ala Leu Ile Phe Val Leu Thr
210 215 220

Ile Gly Val Ile Ile Cys Val Phe Ile Ile Phe Leu Leu Ile Phe Ile
225 230 235 240

Ile Ile Asn Trp Ala Ala Val Lys Ala Phe Trp Gly Ala Lys Ala Ser
245 250 255

Thr Pro Glu Val Gln Ser Glu Gln Ser Ser Val Arg Tyr Lys Asp Ser
260 265 270

Thr Ser Leu Asp Gln Leu Pro Thr Glu Met Pro Gly Glu Asp Asp Ala
275 280 285

Leu Ser Glu Trp Asn Glu
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<210> 10
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(22)

<400> 10
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<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(24)

<400> 11
aatattctgt aatatccttt ggtt 24

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(24)

<400> 12
ctttgtatgt cacattccct gaag 24

<210> 13
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<220>
<221> primer_bind
<222> (1)..(24)

<400> 13
gaggtacaat ccgagcagag ttct 24

<210> 14
<211> 600
<212> DNA
<213> Homo sapiens

<400> 14
gtcccggatc cgcgagggac gcagggcgtt gggaacagag gacactccag gcgctgaccc 60

tgggaggcca ggaccagggc caaagtcccg tgggcaagag gagtcctcag aggtccttca 120

ttcagcggtt ccgggaggtc tgggaagccc acggcctggc tggggcaggg tcaacgccgc 180

caggccgcca tggtcctgtg ctggctgctg cttctggtga tggctctgcc cccaggcacg 240

acgggcgtca aggactgcgt cttctgtgag ctcaccgact ccatgcagtg tcctggtacc 300

tacatgcact gtggcgatga cgaggactgc ttcacaggcc acggggtcgc cccgggcact 360

ggtccggtca tcaacaaagg ctgcctgcga gccaccagct gcggccttga ggaacccgtc 420

agctacaggg gcgtcaccta cagcctcacc accaactgct gcaccggccg cctgtgtaac 480

agagccccga gcagccagac agtgggggcc accaccagcc tggcactggg gctgggtatg 540

ctgcttcctc cacgtttgct gtgaccaaca gggaggacag ggcctgggac tgttcttcca 600

<210> 15

<211> 375

<212> DNA

<213> Homo sapiens

<400> 15

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aaggactgcg tcttctgtga gctcaccgac tccatgcagt gtcctggtac ctacatgcac 120

tgtggcgatg acgaggactg cttcacaggc cacggggtcg ccccgggcac tggtccggtc 180

atcaacaaag gctgcctgcg agccaccagc tgcggccttg aggaacccgt cagctacagg 240

ggcgtcacct acagcctcac caccaactgc tgcaccggcc gcctgtgtaa cagagccccg 300

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ccacgtttgc tgtga 375

<210> 16

<211> 124

<212> PRT

<213> Homo sapiens

<400> 16

Met Val Leu Cys Trp Leu Leu Leu Leu Val Met Ala Leu Pro Pro Gly
1 5 10 15

Thr Thr Gly Val Lys Asp Cys Val Phe Cys Glu Leu Thr Asp Ser Met
20 25 30

Gln Cys Pro Gly Thr Tyr Met His Cys Gly Asp Asp Glu Asp Cys Phe
35 40 45

Thr Gly His Gly Val Ala Pro Gly Thr Gly Pro Val Ile Asn Lys Gly
50 55 60

Cys Leu Arg Ala Thr Ser Cys Gly Leu Glu Glu Pro Val Ser Tyr Arg
65 70 75 80

Gly Val Thr Tyr Ser Leu Thr Thr Asn Cys Cys Thr Gly Arg Leu Cys
85 90 95

Asn Arg Ala Pro Ser Ser Gln Thr Val Gly Ala Thr Thr Ser Leu Ala
100 105 110

Leu Gly Leu Gly Met Leu Leu Pro Pro Arg Leu Leu
115 120

<210> 17

<211> 569

<212> DNA

<213> Homo sapiens

<400> 17

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gtaacagagc cccgagcagc cagacagtgg gggccaccac cagcctggca ctggggctgg 180

gtatgctgct tcctccacgt ttgctgtgac caacagggag gacagggcct gggactgttc 240

tcccagatcc gccactcccc atgtccccat gtccttcccc cactaaatgg ccagagaggc 300

cctggacaac ctcttgcggc cctggcttca tcccttctaa ggctgtccac caggagcccg 360

gtgctagggg aagcatcccc aggcctgact gagcggcagg ggagcacggc ccgtgggttt 420

gattgtatta ctctgttcca ctggttctaa gacgcagagc ttctcacatc tcaatcagga 480

tgcttctctc cattggtagc actttagagt ccatgaaata tggtaaaaaa tatatatata 540

tcataataaa tgacagctga tgttcaaaa 569

<210> 18

<211> 166

<212> DNA

<213> Homo sapiens

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aaggactgcg tcttctgtga gctcaccgac tccatgcagt gtcctggtac ctacatgcac 120

tgtggcgatg acgaggactg cttcacaggc cacggggtcg ccccgg 166

<210> 19

<211> 13

<212> PRT

<213> Homo sapiens

<400> 19

Ala Thr Ser Cys Gly Leu Glu Glu Pro Val Ser Tyr Arg
1 5 10

<210> 20

<211> 128

<212> PRT

<213> Homo sapiens

<400> 20

Met Arg Thr Ala Leu Leu Leu Leu Ala Ala Leu Ala Val Ala Thr Gly
1 5 10 15

Pro Ala Leu Thr Leu Arg Cys His Val Cys Thr Ser Ser Ser Asn Cys
20 25 30

Lys His Ser Val Val Cys Pro Ala Ser Ser Arg Phe Cys Lys Thr Thr
35 40 45

Asn Thr Val Glu Pro Leu Arg Gly Asn Leu Val Lys Lys Asp Cys Ala
50 55 60

Glu Ser Cys Thr Pro Ser Tyr Thr Leu Gln Gly Gln Val Ser Ser Gly
65 70 75 80

Thr Ser Ser Thr Gln Cys Cys Gln Glu Asp Leu Cys Asn Glu Lys Leu
85 90 95

His Asn Ala Ala Pro Thr Arg Thr Ala Leu Ala His Ser Ala Leu Ser
100 105 110

Leu Gly Leu Ala Leu Ser Leu Leu Ala Val Ile Leu Ala Pro Ser Leu
115 120 125